# REMARKS

This Amendment is submitted in response to the Examiner's Action dated October 23, 2001, having a shortened statutory period set to expire January 23, 2002.

In that action, the Examiner has sustained the rejection of Claims 1-3, 12-13, and 19-20 under 35 U.S.C. § 102(e) as being anticipated by *Li et al.* U.S. Patent No. 6,205,418. That rejection is respectfully traversed insofar as it might be applied to the claims as amended in the submission contained herein.

In the previous response, Applicant urged the Examiner to consider that the invention in the present application is directed to a text string data structure and urged the Examiner to consider that the table disclosed at column 8, line 29 with *Li et al.* is a database and could not be considered a text string as that term of art is normally utilized by those having ordinary skill in the art.

Upon a further review of the Examiner's remarks, Applicant notes that despite the characterization of the invention as a "text string data structure" within the preamble of each of the claims, selected claims referred to a "multi-field data object..." leading the Applicant to believe that the Examiner may be interpreting the table of *Li et al.* as a "data object" despite the characterization within the preamble of these claims as being directed to a "text string data structure...."

Consequently, based upon a careful consideration of the Examiner's comments, each instance of a "data object" in the present claims has been deleted and amended to refer to a "text string object." Certain typographical errors have also been corrected. Applicant does not believe these amendments constitute new arguments which must be considered by the Examiner as the Applicant has consistently differentiated the *Li et al.* reference as referring to a table and the present invention as directed to a text string. Consequently, the Examiner is believed to have considered this terminology previously. Entry of this Amendment is therefore believed to be appropriate as

Applicant believes that a "text string" is not anticipated, shown or suggested by the table contained within *Li et al.* and entry of this Amendment will clearly narrow this issue for possible appeal. Thus, entry of this Amendment is earnestly solicited.

The invention in the present application is, as noted in Applicant's previous response, directed to a text string data structure which includes multiple fields. The differentiation between a "text string" and a database contained within a table such as that set forth in *Li et al.* is substantial. A multi-field text string can be processed as any text string within a computer and a selected field within that text string may be selected by the computer for utilization without reference to a database or translation table such as that disclosed within *Li et al.* Consequently, when utilizing the multi-field text strings of the present application, multiple languages may be expressed within multiple fields within the text string and the computer in question may simply be directed to select a particular field from within the text string when processing that text string in a manner of all text strings. This eliminates the necessity of referring to a translation table such as that disclosed within *Li et al.* and is a primary benefit of the present application. *Li et al.* expressly refers to translation of embedded text strings utilizing the system described therein and it is beyond cavil that the present invention, providing multiple fields within a text string eliminates the necessity of mapping each text string to a translation table or transform database such as that disclosed within *Li et al.* Consequently, Applicant urges that *Li et al.* fails to anticipate, show or suggest the invention set forth within these claims and withdrawal of the Examiner's rejection of Claims 1-3, 12-13, and 19-20, as amended herein is respectfully requested.

The Examiner has also rejected Claims 4-11, 14-18, and 21-25 over *Li et al.* in combination with *Renegar* U.S. Patent No. 6,024,571 as unpatentable under 35 U.S.C. § 103(a). That rejection is also respectfully traversed. As noted in Applicant's previous response, *Renegar* discloses a printed translation assistance learning aid which includes printed indicia including words and phrases in a first and second language in a phonetic pronunciation of those words. Nothing within *Renegar* shows or suggests in any way a "text string data structure" which is embedded within a computer

usable medium as set forth within the present claims and no combination with *Renegar* with *Li et al.* can be said to show or suggest this novel data structure.
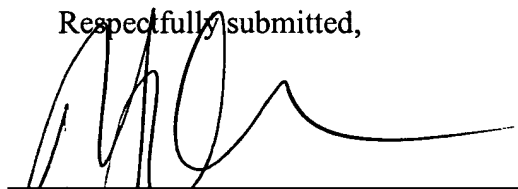
Further, as previously noted in Applicant's response to the initial rejection, Claims 10 and 16 expressly recite that the third character string within the text string data structure is prefixed by "at least one character with a low sort value." The Examiner has expressly noted a rejection of these claims and directed Applicant's attention to the rejection of Claim 6; however, these claims expressly recite the prefixing of a third character string by "at least one character with a low sort value" and *Li et al.* and *Renegar* are absolutely and completely silent with respect to any suggestion for the prefixing of a character string with a character of low sort value as expressly set forth within these claims, whether the present Amendment is entered or not. Consequently, Applicant urges the Examiner to consider that the rejection of claims 10 and 16 which expressly recite the prefixing of the third character string by "at least one character with a low sort value" is not well founded as both of the references cited by the Examiner fail to show or suggest in any way the prefixing of a character with a low sort value in the manner which is expressly set forth within these claims.

The Examiner has addressed this argument in the present response noting that *Li et al.* discloses the utilization of an ampersand, a character before the translation string "aide" believing that this constitutes "at least one character with a low sort value...." In response to this position, Applicant urges the Examiner to consider that *Li* itself is expressly contrary to the position taken by the Examiner. The ampersand symbol, at column 9, lines 4 *et seq.*, is described as being utilized to indicate which character within a given word or phrase is presented as underlined to the user for use as a so-called "hot key" or accelerator. Those having ordinary skill in the art will appreciate that this character will thus not be utilized in any type of sort operation and is merely present within the text string to indicate which of the characters will select that command when entered as a "hot key." The Examiner's position with respect to the "low sort value" of the ampersand signal is therefore not believed to have merit.

Consequently, Applicant urges that at the very least, Claims 10 and 16, whether the present Amendment is entered or not, contain features which are entirely absent from the references cited by the Examiner and that the remaining claims, as amended herein, define patentable subject matter over this combination of references and that the Examiner's rejection should be withdrawn and the application advanced to issue.

No fee is believed to be required; however, in the event any additional fees are required, please charge IBM Corporation Deposit Account No. **09-0447**. No extension of time is believed to be required; however, in the event any extension of time is required, please consider that extension requested and please charge any associated fee and any additional required fees, to IBM Corporation Deposit Account No. **09-0447**.

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# REDACTED CLAIMS

1. (Amended)  A text string data structure within a computer usable medium, comprising:

    a multi-field [data] <u>text string</u> object encapsulating a plurality of discrete fields;

    a first field within the multi-field [data] <u>text string</u> object containing a first character string representing a word; and

    a second field within the multi-field [data] <u>text string</u> object containing a second character string representing the word.

2. (Unchanged)  The text string data structure of claim 1, wherein the second character string is different from the first character string.

3. (Unchanged)  The text string data structure of claim 1, wherein the first character string contains characters from a first character set employed by a first human language and the second character string contains characters from a second character set employed by a second human language.

4. (Unchanged)  The text string data structure of claim 1, wherein the first character string contains characters for a first human language and the second character string contains characters for a second human language which sound-map to characters within the first character string.

5. (Unchanged)  The text string data structure of claim 1, wherein the first character string contains an ideograph and the second character string contains a phonetic spelling of the ideograph.

6. (Amended)  The text string data structure of claim 1, further comprising:

    a third field within the multi-field [data] <u>text string</u> object containing a third character string representing the word.

7. (Unchanged)  The text string data structure of claim 6, wherein the third character string is different from the second character string.

8. (Unchanged)  The text string data structure of claim 7, wherein the third character string is different from the first character string.

9. (Unchanged)  The text string data structure of claim 6, wherein:

the first character string contains characters for a first human language;

the second character string contains characters for a second human language which sound-map to characters within the first character string; and

the third character string is identical to the first character string.

10. (Unchanged)  The text string data structure of claim 6, wherein:

the first character string contains characters for a first human language; and

the third character string contains the first character string prefixed by at least one character with a low sort value.

11. (Unchanged)  The text string data structure of claim 6, wherein:

the first character string contains an ideograph;

the second character string contains Latin characters for a phonetic spelling of the ideograph; and

the third character string contains syllabary characters for a phonetic spelling of the ideograph.

12. (Amended)  A method of encapsulating information in a text string data structure, comprising:

creating a multi-field [data] text string object encapsulating a plurality of discrete fields;

storing a first character string representing a word in a first field within the multi-field [data] text string object; and

5    storing a second character string representing the word in a second field within the multi-field

6    [data] <u>text string</u> object.

1    13. (Amended)  The method of claim 12, wherein the step of storing a second character string

2    representing the word in a second field within the multi-field [data] <u>text string</u> object further

3    comprises:

4    if the first character string contains characters from a first character set employed by a first

5    human language, storing characters from a second character set employed by a second human

6    language in the second field, wherein the second character string is different from the first character

7    string.

1    14. (Amended)  The method of claim 12, further comprising:

2    storing a third character string representing the word in a third field within the multi-field

3    [data] <u>text string</u> object.

1    15. (Unchanged)  The method of claim 14, further comprising:

2    storing characters from a first human language as the first character string;

3    storing characters from a second human language which sound-map to characters within the

4    first character string as the second character string; and

5    storing characters identical to the first character string as the third character string.

1    16. (Unchanged)  The method of claim 14, further comprising:

2    storing the first character string prefixed by at least one character with a low sort value as the

3    third character string.

1    17. (Amended)  The method of claim 14, further comprising:

2    storing an ideograph as the first character string;

3    storing a [latin] Latin character phonetic spelling of the ideograph as the second character

4    string; and

5    storing syllabary characters for a phonetic spelling of the ideograph as the third character

6    string.


1    18. (Unchanged)  The method of claim 14, further comprising:

2    storing identical characters as the first, second, and third character strings.


1    19. (Amended)  A system for encapsulating information in a text string data structure, comprising:

2    means for creating a multi-field [data] text string object encapsulating a plurality of discrete

3    fields;

4    means for storing a first character string representing a word in a first field within the multi-

5    field [data] text string object; and

6    means for storing a second character string representing the word in a second field within the

7    multi-field [data] text string object.


1    20. (Amended)  The system of claim 19, wherein the means for storing a second character string

2    representing the word in a second field within the multi-field [data] text string object further

3    comprises:

4    means, if the first character string contains characters from a first character set employed by

5    a first human language, for storing characters from a second character set employed by a second

6    human language in the second field, wherein the second character string is different from the first

7    character string.


1    21. (Amended)  The system of claim 19, further comprising:

2    means for storing a third character string representing the word in a third field within the

3    multi-field [data] text string object.

22. (Amended) The system of claim 21, further comprising:

means for storing characters from a first human language as the first character string;

means for storing characters from a second human language which sound-map to characters within the first character string as the second character string; and

[menas] means for storing characters identical to the first character string as the third character string.

23. (Unchanged) The system of claim 21, further comprising:

means for storing the first character string prefixed by at least one character with a low sort value as the third character string.

24. (Amended) The system of claim 21, further comprising:

means for storing an ideograph as the first character string;

means for storing a [latin] Latin character phonetic spelling of the ideograph as the second character string; and

means for storing syllabary characters for a phonetic spelling of the ideograph as the third character string.

25. (Unchanged) The system of claim 21, further comprising:

means for storing identical characters as the first, second, and third character strings.